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(FILE 'USPAT' ENTERED AT 08:00:59 ON 03 DEC 93)
SET PAGELENGTH SCROLL

L1 4 S (INSECTICIDE? OR
PESTICIDE?)(50A)ORGANOPHOSPHOR?(50A)(DETOX

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1. 5,005,101, Apr. 2, 1991, Method and apparatus for negative charge effect and separation of undesirable gases; James C. Gallagher, et al., 361/231; 96/54; 323/903; 361/225 [IMAGE AVAILABLE]

US PAT NO: 5,005,101 [IMAGE AVAILABLE] L1: 1 of 4

DETDESC:

DETD(200)

Other embodiments may be used to detoxify pesticides or hazardous waste. The classifications include organophosphorous pesticide, chlorinated hydrocarbon waste, brominated hydrocarbon rodenticide, heavy metal fungicide, chlorinated hydrocarbon pesticide, and polyaromatic red dye mixture. These include malathion, PCBs, methyl bromide, phenylmercuric acetate, kepone sylene azo-B-naphthol, 1-methylaminanthraquinone, sucrose, graphite and silica binder, as all are known to react with plasmas.

2. 4,880,624, Nov. 14, 1989, Volatile attractants for diabrotica species; Robert L. Metcalf, et al., 424/84 [IMAGE AVAILABLE]

US PAT NO: 4,880,624 [IMAGE AVAILABLE] L1: 2 of 4

SUMMARY:

BSUM(4)

The western, northern, and southern corn rootworms are the most expensive insect pests of North America and annually cost U.S. farmers approximately one billion dollars in yield loss and in cost of preventative treatments with soil insecticides. The era of relatively cheap crop protection against these pests has ended because of generalized rootworm resistance to organochlorine insecticides and the withdrawal of registrations for these insecticides by the U.S. EPA due to widespread environmental contamination. The newer organophosphorous and carbamate insecticides are more expensive and subject to accelerated microbial degradation in soils and a rapid loss of activity. Furthermore, due to the persistence of many of these soil insecticides, groundwater and surface run-off pollution is of much concern to state and federal agencies. Because of the uncertain performance and safety of the major products currently used for larval rootworm control, such as carbofuran (Furadan.TM.), isofenphos (Amaze .TM.), phorate (Thimet.TM.), terbufos (Counter.TM.), a technological void exists for controlling these pests. Even standard cultural methods of pest management such as crop rotations of corn-soybean-corn and corn are endangered as evidence exists that the northern corn rootworm can undergo an extended

diapause for two seasons. Hence, the benefits of yearly crop rotation are threatened.

3. 4,421,750, Dec. 20, 1983, Organophosphoric acid ester anhydrides as pesticides; Hiromichi Ishikawa, et al., 514/106; 558/127, 152; 987/192 [IMAGE AVAILABLE]

US PAT NO: 4,421,750 [IMAGE AVAILABLE] L1: 3 of 4

SUMMARY:

BSUM(33)

An advantage of the new compound or composition of this invention is that it provides a complete or substantially complete control of the insect and acarine pests with lower rates of the application of the active compound of the formula (I) than are required when the known pyrophosphoric acid P,P,P'-trialkylester-P'-alkylamides of the hereinbefore-mentioned literatures are applied. Particularly, this applies to when the composition of this invention is used to control "resistant" strain of the insects which are substantially not affected by application of the known insecticides of the organophosphorous compound type, because such "resistant" strain of the insects have developed an ability to detoxify the known organophosphorous insecticides through metabolism.

4. 3,894,861, Jul. 15, 1975, Grass growth control compositions; Frederick Anthony Hartman, 504/175, 201; 987/168 [IMAGE AVAILABLE]

US PAT NO: 3,894,861 [IMAGE AVAILABLE] L1: 4 of 4

DETDESC:

DETD(44)

Another aspect of the present invention encompasses solid and liquid retardant compositions which include, in addition to the aminomethylphosphonate and carrier, a safe and effective amount of other biologically active adjuvants. As used herein the term "biologically active adjuvants" includes insecticides, fungicides, herbicides, fertilizers, antimicrobial agents, and the like. The selection of adjuvant depends primarily upon the needs of the individual user. Such adjuvants are compatible with the intended uses of the aminomethylphosphonates and the beneficial properties of such adjuvants control related problems such as weed and insect infestation, plant diseases, and microbial degradation of the active. The preferred adjuvants for use herein are herbicides, insecticides, anti-microbial agents and fertilizers. Nonlimiting examples of suitable adjuvants include, for example, herbicides such as chlorophenoxy herbicides, carbamate herbicides, toluidine herbicides and thiocarbamate herbicides; insecticides such pyrethroid insecticides, carbamate insecticides, and organophosphorous insecticides; and the like.

=> file jpoabs
FILE 'JPOABS' ENTERED AT 08:24:42 ON 03 DEC 93

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2472 INSECTICIDE?

603 PESTICIDE?

391 ORGANOPHOSPHOR?

145 DETOX?

7333 DEGRA!!!!!!

L2 0 (INSECTICIDE? OR
PESTICIDE?)(50A)ORGANOPHOSPHOR?(50A)(DETOX? OR
DEGRA!!!!!!)

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L1 4 S (INSECTICIDE? OR PESTICIDE?)(50A)ORGANOPHOSPHOR?(50A)(DETOX

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L2 0 S L1

FILE 'USPAT' ENTERED AT 08:25:05 ON 03 DEC 93

L3 0 S ORGANOPHOSPHOR?(10A)ANHYDRASE?

L4 0 S ORGANOPHOSPHOR?(200A)GAS(W)MASK

L5 273 S GAS(W)MASK

L6 29 S GAS(W)MASK(200A)(ENZYM? OR CATAL?)

L7 40 S (FILTER? OR FILTRAT?)(50A)ORGANOPHOSPHOR?

L8 7 S L7 AND (DETOX? OR DEGRAD?)

L9 9 S (MASK? OR RESPIRATOR?)(100A)ORGANOPHOSPHOR?

=> d 1-9

1. 5,206,371, Apr. 27, 1993, Quaternary pyridinium compounds; James C. Powers, et al., 546/290, 292, 303, 338 [IMAGE AVAILABLE]

2. 5,201,946, Apr. 13, 1993, Liquid spray mask and method; Patrick W. Marsek, 106/208, 2, 311; 252/88 [IMAGE AVAILABLE]

3. 5,180,831, Jan. 19, 1993, Quaternary pyridinium compounds; James C. Powers, et al., 546/291; 540/450, 484; 546/193, 268, 281, 292, 300, 330, 331, 332 [IMAGE AVAILABLE]

4. 5,104,711, Apr. 14, 1992, Liquid spray masking system and method; Patrick W. Marsek, 428/78; 427/259, 264, 282; 428/191, 194, 195 [IMAGE AVAILABLE]

5. 5,102,634, Apr. 7, 1992, Method for purifying exhaust gas and apparatus; Hiroaki Hayashi, et al., 423/210, 213.7, 245.1, 245.3 [IMAGE AVAILABLE]

6. 4,518,650, May 21, 1985, Protective clothing of fabric containing a layer of highly fluorinated ion exchange polymer; Walther G. Grot, et al., 428/286, 338, 421, 422 [IMAGE AVAILABLE]

7. 4,515,761, May 7, 1985, Protective garment or cover, composite semipermeable barrier fabric, and use in detoxification; Irene G. Plotzker, 423/240R; 95/52; 96/12; 422/5; 423/240S, 659; 428/422; 521/28 [IMAGE AVAILABLE]

8. 4,212,757, Jul. 15, 1980, Peroxygen bleaching and compositions therefor; Gaylen R. Brubaker, et al., 252/95; 8/111; 252/99, 102, 186.38 [IMAGE AVAILABLE]

9. 3,911,121, Oct. 7, 1975, Terpene phenol resin compositions containing

organophosphorus insecticides; Lyman Richard Roberts, 514/136, 119, 120, 121,
122, 132, 144, 970 [IMAGE AVAILABLE]

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